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# **Turkey**

# **Grain and Feed Annual**

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## **Report Highlights:**

Although it is still early post estimates MY 2011 wheat production will reach 16.7 MMT, assuming sufficient rain and favorable conditions continue from April to May. Total wheat imports are expected to reach 3.4 MMT by the end of MY 2010. Corn production is estimated at 3.6 MMT for MY 2010 and forecasted at 3.2 MMT for MY 2011. Due to restrictions on corn imports under the Biosafety Law, corn imports were only 88,430 MT in the first six months of MY 2010. If biotech corn applications are approved for feed use by May 2011, corn imports are expected to reach 400,000 MT in MY 2010. Rice production is forecasted at 717,000 MT in MY 2011. Rice imports reached 243,367 MT and are expected to reach to 300,000 MT in MY 2010.

### **Executive Summary:**

In 2010, Turkey produced 227,852 MT of certified wheat seed, an increase of 29% from MY 2009. Total wheat area in MY 2011 is 7.4 million ha but only 1.14 million ha were planted with certified wheat seed. Weather conditions for the MY 2011 wheat and barley crops were favorable in the Central Anatolian region, Aegean region and Thrace region. Dry weather in October and November 2010 in Cukurova and Southeast Anatolia caused some damage. March and April rainfall is above average in most parts of the country but will increase the susceptibility of the crop to yellow rust damage in the Central and South East Anatolian regions. Winter wheat planting, which finished in October 2010 was approximately 500,000 ha below the previous year, mainly due to farmers switching to corn or cotton because of their higher prices and higher government supports.

Although it is still early to reliably forecast MY 2011 wheat production, post estimates it will reach 16.7 MMT, assuming sufficient rain and favorable conditions continue from April to May

Due to high premiums and prices for cotton and soybeans, some corn producers are expected to plant cotton and soybeans instead of corn. This will lead to an overall decrease in the area planted to corn in MY 2011. Corn area is estimated at 490,000 ha for MY 2010 and forecasted at 400,000 ha for MY 2011. Corn production is estimated at 3.6 MMT for MY 2010 and forecasted at 3.2 MMT for MY 2011.

Rice planting is expected to decrease a bit and is forecasted at 100,000 ha area in MY 2011. Alternative products for rice are sugar beets and sunflower in Thrace region; however rice provides a higher profit for farmers than these products. Rice production is forecasted at 717,000 MT in MY 2011.

In a normal season, Turkish lentil production is close to 500,000 MT. Post estimates lentil production at 500,000 MT in MY 2010 and 550,000 MT in MY 2011.

Total wheat imports are expected to reach 3.4 MMT by the end of MY 2010. There was a high volume of imports between February and April 2011.

Turkey imported 32,101 MT of barley, mainly malting barley and exported 22,199 MT in the first nine months of MY 2010. TMO is expected to open a tender for barley exports in the following months to reduce barley stocks.

Due to restrictions on corn imports under the Biosafety Law, corn imports were only 88,430 MT in the first six months of MY 2010. If biotech corn applications are approved for feed use by May 2011, corn imports are expected to reach 400,000 MT in MY 2010.

Rice imports are expected to reach 300,000 MT in MY 2010. Rice exports reached record levels in MY 2010, after Turkey benefited from the Egyptian rice ban by becoming the major supplier of milled rice to the Middle East. Turkey discovered Middle East rice export market after Egypt rice export ban. Turkey tends to import paddy rice, mill it in Turkey and export it to Middle East countries.

#### **Commodities:**

Wheat

Barley

Corn

Rice, Milled

#### **Production:**

## Rainfall

Average cumulative rainfall across most of the country between October 2010 and March 2011 was 382 mm, which is lower than in the previous year (485.3 mm) but higher than the long-term average. The Marmara, Aegean, Black Sea and Mediterranean regions received heavy rainfall, the Central Anatolian especially Polatli and Cankiri areas, received heavy rain and snowfall, but the Konya and South Central Anatolian areas didn't get high rainfall compared to the previous year. South East and East Anatolia had minimal rainfall in the autumn of 2010. Dry weather in October and November 2010 in Cukurova and Southeast Anatolia caused a small amount of damage to the crop. The Diyarbakir, Mardin and Siirt areas suffered a drought for more than 2 months after wheat planting, forcing some farmers to re-plant wheat. Central Anatolia was also very dry until heavy snow came in late February. March and early April saw fairly heavy rainfall throughout most of the country. Rainfall in April created some flood damage in Cukurova and South East Anatolia and may lead to susceptibility of yellow rust in the Central Anatolia and South East Anatolia region.

Table 1: Cumulative rainfall

	Cumulative Rainfall in Turkey											
Region	Oct 2010-Feb 2011 (mm)	Oct 2009-Feb 2010 (mm)	Normal (mm)									
Marmara	485.7	571	384.2									
Aegean	447.8	581.2	408.3									
Mediterranean	566.4	763.2	540.9									
Central Anatolia	270.6	249.9	188.5									
Black Sea	422.8	457.6	442.3									
East Anatolia	227.3	385.6	295									
South East Anatolia	222.6	418.7	346.3									
Turkey Total	382.5	485.3	371.3									

Source: State Meteorological Service

#### Wheat

Winter wheat planting, which finished in October 2010, was approximately 500,000 ha below the previous year. The decrease was mainly due to farmers switching to corn or cotton because of higher prices and higher government supports. Total wheat area in MY 2011 is 7.4 million ha and only 1.14 million ha area was planted with certified wheat seed, despite government supports (60 TL/ha) for usage of certified wheat seed. In 2010, Turkey produced 227,852 MT of certified wheat seed, which is an

increase of 29% from MY 2009. Although it is still early to reliably forecast MY 2011 wheat production, based on favorable weather conditions throughout most of Turkey thus far, wheat production is estimated at 16.7 MMT in MY 2011, assuming sufficient rain and favorable conditions continue from April to May.

In the Cukurova region (Adana, Tarsus, Osmaniye) wheat area decreased 30% in MY 2011. Most of the removed area was allocated for cotton instead, and some for corn. In this region in particular, farmers had a difficult time deciding between corn and cotton production. Corn is profitable in terms of high yields, low cost, ready buyers and relatively high prices. Cotton is profitable due to record high prices and a government subsidy (420 TL/MT). In general, farmers with irrigated land or in hilly areas prefer cotton instead of corn, if they can get seed but the availability of cotton seed was a problem for the whole country. Alternately, corn production is supported by the five starch companies in Turkey (3 of them are in Adana) who usually contract with farmers for supplies. In the relatively high areas of Cukurova, farmers also planted sunflower, taking additional acreage from wheat. The sunflower area is increasing every year in the region because of its low production cost, high yield and high government premium (230 TL/MT). Ten years ago the sunflower area in the region was almost zero and today it is 4,500 ha. Another competitive product in Cukurova is soybeans, however despite a high government premium (500 TL/ha) for soybeans, acreage increased only a little and will not have a significant impact on wheat or corn area.

In early March, wheat leaves in the region were formed but tillers had not yet been observed. The wheat looked to be in very good condition. Farmers in the region are sophisticated and effectively combat diseases such as yellow rust with chemicals. There was enough rain during February and March and weather conditions were very good in the first weeks of April.

In MY 2011, wheat area in South East Anatolia decreased 35% as farmers switched to cotton from wheat because of the high cotton prices. The main switch was from durum wheat, as durum wheat prices were are now almost the same as milling wheat prices. The South East Anatolia generally produces 1.2-1.3 MMT of durum wheat but in My 2011 there will be only about 900,000 MT of durum wheat production in South East Anatolia.

Yellow rust is expected to be a problem in the region but it will not be as bad as MY 2010, when almost 35% of the crop was lost. There were some attempts to combat with disease but it was not highly coordinated and fully supported by government agencies.

The large irrigation project (GAP or Southeast Anatolia Project) has positively affected the variety of crops in the region. Under the project, 300,000 ha are already under irrigation and 1.8 million ha are scheduled to be irrigated by 2013. The Amik Valley (Hatay region) and Aegean region there was an almost 20% decrease in the wheat area in MY 2011 as farmers returned back to their traditional crop; cotton. So far for MY 2011, weather conditions are favorable for wheat growing.

The Aegean region will have a 20% loss in wheat area due to increased cotton production. Corn and sunflower producers also switched to cotton, especially in Manisa, Soke and Izmir.

Wheat area in the Central Anatolia region remained the same in MY 2011 despite an increase in corn area in MY 2009 and MY 2010 on irrigated land (especially in the Eregli region). Because of the high

altitude, low rainfall and lack of irrigation system, Central Anatolia farmers have mainly two options, one is wheat and the other is barley (on some irrigated land sugar beet can also be grown). Quality is still a big problem in the region but so far rainfall and weather conditions have been favorable for wheat. Rodent problems are still a concern in Corum, Yozgat and Cankiri. Yellow rust will probably be seen in some parts of the region.

In Konya, the blue tunnel irrigation project which will be completed in 2013, will have a dramatic impact on wheat production in the region. This project will divert the Goksu river, one of the biggest rivers in Turkey, through a 17 km tunnel to the Konya valley and will provide 210,000 hectares with 410 million meter cube of water/year for irrigation.

In the Thrace region, late rainfall in MY 2010 negatively affected yields, and wheat area is expected to remain the same in MY 2011. Most producers had no option but to plant other products except wheat.

In the Black Sea and East Anatolia regions, the wheat area will increase due to farmers planting whet in previously fallow fields.

Table 2: Wheat production forecast

	Tur	key: Wheat p	roduction	estimate and	l forecast by r	egion	
Regions				_	2010	<u> </u>	2011
	MY 2010 Avg.yield (MT/HA)	Long term Avg.yield (MT/HA)	Harvest Time	Harvested Area (ha)	Production (MT)	Harvested Area (ha)	Production (MT)
Cukurova region	3.5-4.5	4.5-5.5	May 10-June 10	300,000	1,300,000	210,000	1,050,000
Hatay region	3	5-5.5	May 25-June 25	100,000	300,000	80,000	350,000
Southeast region	2	3-3.5	May 15-June 25	1,000,000	2,000,000	650,000	1,900,000
Central Anatolia	2-2.5	1.5-2	June 25-July 25	3,000,000	6,000,000	3,000,000	6,000,000
Polatli	2.8-3	3.5	June 15-July 20	120,000	350,000	130,000	380,000
Aegean region	2-2.5	3	May 25-June 25	650,000	1,500,000	500,000	1,500,000
Aydin region	4.5	4	May 20-June 10	8,000	50,000	5,000	20,000
Thrace	3.5	4.5-5	June	600,000	2,500,000	600,000	2,500,000

			15-July 15				
Other regions	1.3	1.5	June 15-July 15	2,222,222	3,000,000	2,300,000	3,000,000
Total	2.12	2.3	My 15- July15	8,000,222	17,000,000	7,475,000	16,700,000

Fertilizer prices are not stable and have a tendency to increase in October. In October 2010 fertilizer price increased 30% and some farmers couldn't effort to buy fertilizer for wheat. This would affect on wheat yields, especially on smaller farms.

Table 3: Fertilizer price

	Turkey: Fertilizer prices											
Type of fertilizer December 10, 2009 February 10, 2010 March 30, 2013 (TL/MT) (TL/MT) (TL/MT)												
Compound fertilizers <b>DAP</b> (Diammonium phosphate)	670	920	1,350									
Nitrate fertilizers U <b>rea</b>	585	680	960									

Wheat premiums remained the same at 50 TL/MT but wheat certified seed support increased to 60 TL/ha in MY 2011 from 50 TL/ha in MY 2010. Farmers usually use 200 kg seed/ha but most farmers would prefer to use more seed per hectare in order to get a higher yield. To meet this demand, Turkey would need to produce an estimated 650,000 MMT of certified seed/year but can only produce 227,852 MT of certified wheat seed currently.

Table 4: Government support to wheat producers

	Turkey: Government support to wheat producers												
Year	Certified seed	Soil analysis	Premium	Diesel	Fertilizer								
i ear	(TL/ha)	(TL/ha)	(TL/MT)	(TL/ha)	(TL/ha)								
2005	50	-	-	24	16								
2006	50	10	30	-	-								
2007	50	10	35	28.8	21.3								
2008	45	10	40	28.8	21.3								
2009	50	22.5	45	29.3	38.3								
2010	50	25	50	32.5	42.5								
2011	60	25	50	37.5	47.5								

Source: MARA

# **Barley**

Because barley is less susceptible to adverse weather conditions, farmers in Central Anatolia and Southeast Anatolia who face variable weather conditions prefer planting barley. Turkish barley production for MY 2009 is estimated at 6 MMT and for MY 2010 is forecasted at 5.9 MMT.

Central Anatolia saw 10% lower yields from barley crops in MY 2010 compared to MY 2009 due to heavy rain in some regions and high temperatures in others. Barley production in South East Turkey decreased 10-15% in MY 2010 due to rust problems, early freezing and high temperatures damaged yields. Sanliurfa, Mardin, and Diyarbakir also lost 10% of their barley output due to bad weather conditions and rust problems. The Gaziantep region saw high yields compared to other parts of Southeast Turkey. The average yield was around 4MT/ha. Yeilds in the Kahramanmaras region were also close to average levels, at 3.5 MT/ha.

In Central Anatolia, the Yozgat, Corum and Konya region both yields and quality went down in MY 2010 due to rust and mouse damage. Yields in the Konya region were 3 MT-4 MT ha in MY 2009 and just 2 MT-3 T in MY 2010. The decrease was due to a lack of rain in April and heavy rainfall in June.

The barley production area in South East Anatolia decreased in MY 2011 to 3.2 Million hectares from 3.35 Million in MY 2010, and production is forecasted at 5.7 MMT for MY 2011. Areas were instead allocated to plant cotton or lentil as a first crop and cotton as a second crop.

The government announced a premium of 40 YTL/MT for barley, rye, and oat growers in MY 2011, the same as the previous 2 years.

### Corn

Due to the high premium and prices for cotton and soybeans, some corn producers are expected to plant cotton and soybeans instead of corn. This will lead to an overall decrease in the area planted to corn in MY 2011. The corn area is estimated at 490,000 ha in MY 2010 and forecasted at 400,000 ha in MY 2011. Corn production is estimated at 3.6 MMT for MY 2010 and forecasted at 3.2 MMT for MY 2011.

The Cukurova, South East Anatolia and Aegean regions are the primary corn producing regions in Turkey. The poultry sector in the Aegean and Marmara regions and the starch sector in the Adana region usually set the corn price. The corn price increased to 400 USD/MT in March 2011, but corn farmers had sold their corn at 330 USD/MT last summer.

## First crop corn planting

First crop corn planting is common in the Cukurova, Aegean and Marmara regions. Due to wet weather conditions, first crop corn plantings were delayed two weeks in the Cukurova and Aegean regions. This will have a slight negative effect on first crop corn yields. Planting started in the last week of March and was mostly completed by the first week of April.

There was a 25% decrease in the first crop corn area in the Cukurova region and 15% decrease in the Aegean region. First crop corn area remained the same in the Marmara region. The Aegean region is

already traditionally a cotton producing area, however there will be some shifts in the Aydin provinces of Aegean region from corn to cotton, however seed availability limited the switch to cotton. According to the traders some seed companies have even asked ginners to take the seed that was extracted from cotton during ginning.

In the Marmara region first crop corn is also very common and the average yield is around 1,100 MT/ha. Due to the presence of large starch factories nearby in Istanbul and Bursa, the corn area did not decrease in the region. Sugar beet planting is historically very prevalent, especially in the Sakarya area due to the proximity to sugar beet factories, however because of high corn yields most people switched from sugar beets to corn. Another advantage of corn farming in the Marmara region is the ability to have a second crop of vegetables after the corn is harvested. Most corn farmers plant lettuce or spinach after the corn harvest.

There are some efforts to grow silage corn in the Thrace region. However, most farmers prefer to plant either wheat or sunflower here.

# Second crop corn planting

Second crop corn is a common product in Southeast Anatolia, especially in Sanliurfa and Mardin. Cukurova farmers also grow second crop corn. Second crop corn's yield and production was high in South East Anatolia in MY 2010 but there will be 25% decrease in the second crop corn plantation in MY 2011, mainly because of the decrease in wheat production as some acreage was switched to cotton this year (corn is normally planted following wheat harvest)

There will also be a 20% decrease in second crop corn area in the Cukurova region, mainly due to the decrease in the wheat area and increase in second crop soybeans in the region. The corn yields in Cukurova are usually much lower than South East Anatolia, and for this reason the area decrease in South Eastern Anatolia will impact overall production more than the Cukurova region.

In the GAP region, early planting of corn is not suitable but farmers plant it as a second crop after the wheat harvest. Due to the wheat area decrease there will be decrease in second crop corn plantation in the region.

The prevalence of Gray leaf spot (GLS), Northern leaf blight and Southern leaf blight diseases increased in the Cukurova region and badly damaged the second crop corn in MY 2010. In addition, very hot temperatures decreased yields in the region. In MY 2010, second crop corn yields were around 450-600 MT/ha, compared to 700-850 MT/ha in a normal season. In the southeast of Turkey, where most second crop corn was harvested, yields were around 850-900 MT/ha. Normally they are 900-1,050 MT/ha. In the Aegean growing region such as Aydin, second crop yields were around 700 MT/ha, compared to the long-term yield average of 850 MT/ha. The post production estimated of 3.6 MMT in MY 2010 is based on the low yields for second crop corn.

### Rice

Turkey has 100,000 ha of paddy rice plantations, half of which are located in the Thrace and Marmara regions. The major rice producing provinces are Edirne, Samsun, Balikesir, Canakkale, Corum, Cankiri, Kastamonu, Sinop and Adana. The most productive region is Thrace, which contains 10-15% of Turkey's total rice plantation area. Ipsala in Thrace produces 20,000 ha of paddy rice. The average yield in Thrace is 8 MT/ha.

Rice planting started in the middle of May 2010 and finished by the end of the same month. The MY 2010 plantation area increased 10% due to favorable weather conditions and increased water levels in several dams. Rice yield depend on rainfall at the end of August and early September. Harvest starts in September and ends in October. Rice planting is expected to decrease a little bit and forecasted at 100,000 ha area in MY 2011. Alternative products for rice are sugar beet and sunflower in Thrace region; however rice provides a higher profit for farmers than these products.

Turkey has 25,000 paddy rice farms and 4 paddy rice co-operatives. Bandirma, Samsun, Edirne, Tekirdag and Ankara are the locations of the important commodity exchanges for rice. Turkey has 104 paddy rice millers with a yearly capacity of 2,280,000 MT. There are three big investments to increase paddy rice milling capacity. Millers believe that Middle East rice export market will be strong in MY 2011 and invested to increase capacity of mills. Farmers use 180-200 kg/ha of paddy seed.

#### Lentils

In a normal season, Turkish lentil production has been close to 500,000 MT. Post estimates MY 2010 production at 500,000 and forecasts MY 2011 production at 550,000 MT.

The pulse planting area normally changes depending on the availability of seeds, prices and premiums of the previous year's harvest, weather conditions, fertilizer prices, plant diseases, and the presence of weeds like broomrape (Orobanche spp) in the field. The Ministry of Agriculture and Rural Affairs introduced a 90 TL/MT pulse premium in 2008 and increased it to 100 TL/MT in 2009, 2010 and 2011. This high pulse premium led to increased lentil area in MY 2011. The GAP region, which is in South East Anatolia, traditionally grows pulses. GAP development projects, including new dams and irrigation canals, have also led to increased lentil yields and plantation area.

Lentil planting started in December, 2010 and germinated in February, 2011, There was some delay on germination due to dry weather condition. Farmers in South East Anatolia preferred to plant lentil because they can grow cotton after lentil harvest. High lentil price also increased lentil area in the South East Anatolia in MY 2011.

## **Consumption:**

TMO was not an active player at the market in MY 2010. High wheat, barley and corn market prices lead farmers to sell their product on the market instead of to TMO. TMO announced a wheat price (550

TL/MT for milling wheat and 575 TL/MT for durum wheat) on May 17, 2010 and corn price (490 TL/MT) on August 25, 2010. Corn procurement by TMO was very limited due to high price at the market. Low yields in the second crop corn led to a dramatic increase in corn prices.

Table 5: TMO grain procurements

	TMO procurements													
T	Turkey: TMO Grain procurement from June 5, 2009 to February 22, 2010													
Type of Grain	Durum Wheat	Milling Wheat	Barley	Rye	Oat	Corn	TOTAL							
Quantity (MT)	735,000	3,035,000	1,300,000	48,500	4,150	185,000	5,307,650							
7	Turkey: TMO	Grain procuren	nent from May	y <b>17, 2010</b>	to Marc	ch 29, 2011								
Type of Grain	Durum Wheat	Milling Wheat	Barley	Rye	Oat	Corn	TOTAL							
Quantity (MT)	338,931	639,003	922,778	0	0	83,491	1,984,203							

Source: TMO

### Wheat

Bread is a staple food in the Turkish diet. There are many small bakeries around Turkey and also some large industrial type bakeries. Public bread factories are also run by the greater metropolitan municipalities such as Istanbul, Ankara, Bursa, Izmir and Adana. These factories produce bread and other flour products that are cheap and safe for the general public and sell the products through small, private shops. These factories also play a role in the determination of prices as they have a 10-15% market share in the largest cities. There is usually a 25% price difference between normal bread and bread at public bread shops, due mostly to the greater efficiency of the larger factories.

Wheat flour and pasta exporters need to import both high and low quality wheat in order to compete with other flour exporters internationally. There are 715 wheat flour factories distributed around almost all regions in Turkey. The wheat flour production capacity is 32.5 million MT and actual capacity usage was 14.5 MMT in 2010. Large mills located in the Konya region produce high quality wheat, which needs 13% and higher protein content wheat. These mills generally rely on higher quality imported wheat.

# Recent developments in the wheat market (in reverse chronological order)

- On February 25, 2011 the Government of Turkey decreased the import tariff on wheat from 130% to 0% until May 1, 2011.
- On February 15, 2011, TMO held a wheat tender and contracted to import 300,000 MT of average 12.5% protein wheat at 409 USD/MT. This tender went to UPGRAIN company (100,000 MT of from United States) and ROMSPEED SRL (50,000 MT of from U.S. and 150,000 MT from Kazakhstan).

- On January 11, 2011 TMO held a tender and contracted to import 300,000 MT of average 13% protein wheat at an average price of CIF 401.47 USD/MT. Of this 240,000 MT came from the United States, 20,000 MT came from Kazakhstan, 20,000 MT came from Germany and 20,000 MT will come from Ukraine.
- On December 22, 2010 The Turkish Ministerial Council allocated a 1 MMT duty free import quota for wheat to the Turkish Grain Board (TMO) which can be used until December 31, 2011.
- On October 19, 2010 Ukraine imposed quotas on the export of 2.7 million tons of grain, including 500,000 tons of wheat, 200,000 tons of barley, two million tons of corn, and 1,000 tons of each of rye and buckwheat. On March 30, 2011 Ukraine decided to extend grain export quotas until June 30, 2011, having simultaneously increased the quota for maize exports by two million tons.
- On September 2, 2010 TMO announced that it would sell 334,000 MT of wheat to processors starting from September 6, 2010.
- On August 26, 2010 the Turkish Grain Board (TMO) allocated a 330,000 MT zero tariff import quota for EU wheat to the private sector.
- On August 15, 2010 the Government of the Russian Federation imposed the temporary wheat, barley, rye and flour export ban, due to reduced harvest levels after droughts, damaged one third of grain sowings. The embargo was extended to at least June 30, 2011.

Because of the events listed above, there were two recent dramatic price increases for wheat. One was in December and the other was in March.

TMO interventions in the market via the selling of stocks were not very effective in controlling prices because of the inconsistent quality of their stocks. Wheat flour exporters need high-quality wheat and TMO stocks, which are usually of medium and low quality, needs extra processing to ensure consistent quality. The main reason is the TMO wheat procurements are not based on protein or energy content but on physical tests such as foreign material, amount of broken kernels, insect damage, etc. TMO plans to change the procurement system for MY 2011 and has bought new laboratory equipment to test protein and energy content. Their main challenge will be to improve their storage and classification system. The durum wheat price and milling wheat price followed the same trend in MY 2010.

Table 6: Durum wheat price

	TURKEY: Anatolian Durum Wheat price at Commodity Exchange (USD/MT)													
MY	JUN	JUL	AU	SE	OC	NO	DE	JA	FE	MA	AP	MA		
YEA	E	Y	G	P	T	V	C	N	В	R	R	Y		
R														
2006	216	220	235	23	240	258	259	26	27	277	283	291		

				8				1	2			
2007	336	349	341	37 7	441	488	503	51 6	55 4	545	564	616
2008	632	660	612	58 0	466	382	407	36 7	35 5	341	339	324
2009	328	288	301	29 9	290	293	275	28 1	34 8	312	311	305
2010	330	370	356	35 5	370	376	400	391	398	450	457	

Source: Konya CME

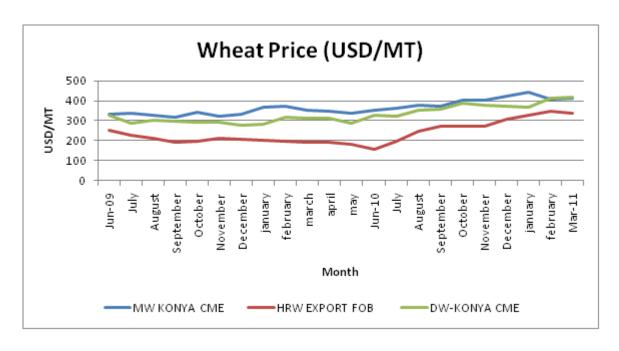
Table 7: Milling wheat price

	TURKEY: Milling Wheat price at Commodity Exchange (USD/MT)														
MY	JUN	JUL	AU	SE	OC	NO	DE	JA	FE	MA	AP	MA			
YEA	E	Y	G	P	Т	V	C	N	В	R	R	Y			
R															
2006	253	245	257	272	275	286	293	304	324	331	330	309			
2007	338	360	350	387	415	427	433	446	478	492	490	485			
2008	466	479	480	450	375	343	352	335	324	315	314	321			
2009	330	339	326	317	341	323	330	369	364	352	349	334			
2010	340	339	378	368	383	400	460	400	390	445	450				

Source: Konya CME

Normally there is a large gap between the domestic wheat price and the world wheat price. Due primarily to the Russian ban and the Ukraine export quota, the world price increased dramatically and almost reached the Turkish domestic wheat price.

Figure 1: Wheat price



## **Barley**

The barley price increased dramatically in December 2010, reaching 333 USD/MT and remaining high in subsequent months. TMO procured 932,580 MT of barley in MY 2010 from domestic farmers and currently has 844,725 MT of barley stocks. Due to the ban on importing biotech products, TMO has been reluctant to export barley as it may be needed by the domestic feed industry if the ban continues to block imports of corn much longer, however it is planning to export some of these in May 2011.

Barley traditionally has been the preferred feed grain in Turkey, especially for ruminants. Half of barley feed consumption went into commercial feed production and the other half was fed directly to livestock or mixed on the farm. Malting barley consumption, which is estimated at 900,000 MT, has been steady in recent years but is expected to increase in MY 2011 due to investments in the beer sector. There are already seven private sector corporations brewing beer and in addition there are nearly 20 more corporations trading brewery product, including barley. There is enough barley production to supply the beer industry, but due to frequent quality problems, beer producers usually import high-quality barley from France.

Table 8: Barley price

	Barley price													
YEA R	JUN E	JUL Y	AU G	SE P	OC T	NO V	DE C	JA N	FE B	MA R	AP R	MA Y		
2007	287	310	302	342	381	407	410	397	400	369	375	428		
2008	417	427	434	396	327	302	310	301	288	270	268	270		
2009	217	220	225	234	245	230	225	236	236	231	236	229		
2010	232	266	256	276	286	288	333	316	334	323	332			

Source: Konya CME

### Corn

Unexpected yield losses in second crop corn in MY 2010 decreased the corn production and on top of that, a new Biosafety Law prohibited corn and corn by-products imports since September 2010. Due to these factors, the corn price in MY 2010 was relatively very high.

Table 9: Corn price

	Turkey: Corn price (USD/MT)													
MONT	SE	OC	NO	DE	JA	FE	MA	AP	MA	JUN	JUL	AU		
HS	P	T	$\mathbf{V}$	C	N	В	R	R	Y	$\mathbf{E}$	Y	G		
MY														
2007	328	351	343	332	332	342	302	369	409	404	448	444		
MY														
2008	404	236	238	239	250	264	261	286	290	297	329	308		
MY														
2009	278	284	279	276	298	307	290	298	288	288	307	301		
MY														
2010	317	336	328	314	340	349	379	400						

Source: Adana CME

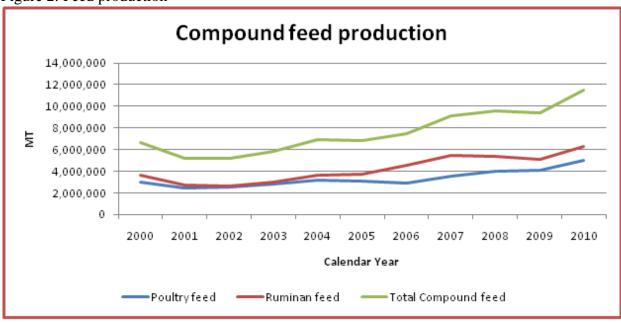
Demand for compound feed has been growing in Turkey due to limited pasture areas and an increasing number of modern livestock and poultry operations. Poultry producers are the most important end users of corn in Turkey. The poultry sector is one of the strongest and most developed food industries in Turkey, and domestic poultry consumption and exports have been increasing every year. The Turkish poultry industry reached a capacity of 1.5 MMT of production this year, up from 200,000 MT 10 years ago. Due to a drastic increase in red meat prices, Turkish consumption of poultry meat increased in 2010. The poultry industry produced 1,044,059 MT of poultry meat in 2010, and is expected to increase production again in 2011.

Corn consumption in the feed sector has been increasing due to the high demand from the poultry sector. Some poultry factories are integrated with feed mills and consume 1,200 MT corn/day, whereas middle-size starch factories consume 250 MT corn/day. Poultry prices are sensitive to corn price increase and currently feedmillers are almost out of corn stocks. If corn imports don't resume, the industry will be negatively affected.

Since the domestic corn price is generally very high (400 USD/MT) compared to world prices, poultry exporters must import corn, corn derivatives and soybean meal to compete internationally. Iraq is currently the largest market for poultry exporters, where a low price and taste are the most important market factors. Saudi Arabia is also a new target market in 2011 and Turkey also aspires to become an important supplier of poultry to the EU and to Russia.

Corn starch users have become the second most important corn users in Turkey.

Figure 2: Feed production



Source: Feed millers association

Feed in the livestock sector represent 70% of total production costs. Turkey's total mixed feed production increased to 11.5 MMT in 2010 from 9.8 MMT in 2009. Turkey imported 4.98 MMT of feed ingredients in 2010, 3.7 MMT in 2009 and 4.9 MMT in 2008. Soybeans are the main feed ingredient (1.756 MMT) that Turkey imported in 2010.

Turkey produced 11.5 MMT of compound feed in 2010. In order to get a high protein content in compound feed, soybeans should be part of the ratio. Soybean imports for the feed sector are around 1.5 MMT to 1.7 MMT. The Biosafety Law, which was published on March 26, 2010 and enforced on September 26, 2010, stopped biotech product imports for a third time since October 2009. Before implementation of the new Law, users and importers purchased a high amount of soybeans, corn and corn derivatives such as DDGS and CGF before September 2010. As expected, all biotech imports were stopped after September 2011 but then on January 26, 2011, the Turkish government approved three soybean events (MON89788, MON40-3-2 and A2704-12) for use in feed sector only.

Since then the feed sector could import soybeans from the United States, but they still cannot import biotech corn. As a result, the compound feed price continues to increase, especially for broiler feed which contains a high amount of corn and corn derivatives. Unfortunately, the layer industry is also facing relatively lower egg prices.

FEED PRICE (TL/MT)

1200
1000
800
600
200

ymra port ymr

Figure 3: Feed price

Source: Feed millers association

The soybean and soybean meal price started to decrease in February and March after the Biosafety Board decision. The corn price is still very high. The barley and wheat bran prices are also very high due to a shortage of domestic production and stocks.

TURKEY: FEED RAW MATERIAL PRICE

800
700
600
400
300
200
100
0

Price
SOYBEAN MEAL — FULL FAT SOYBEAN BARLEY WHEAT BRAN

Figure 4: Feed raw material

Source: Feed millers association

#### Rice

Turkish consumers prefer the Calrose, Baldo and Osmancik varieties of rice. Annual rice consumption is approximately 7 kg/person. U.S. Jupiter variety rice sales were successful in MY 2009 and MY 2010.

In Turkish cuisine rice is very important for making pilaf, and although the Jupiter variety was previously not deemed appropriate for making pilaf, apparently opinions have changed. Most people prefer the Osmancik (domestic variety), then Calrose and now in third place they prefer the Jupiter variety. The main disadvantage of U.S. rice in the past was high prices, but if the United States continues to sell low-priced high-quality rice in MY 2010, U.S. rice sales can easily reach 130,000 MT. High rice prices in the U.S. almost stopped paddy rice imports to Turkey in February and March 2011. Traders said that price would have to decrease 50-100 USD/MT for them to import paddy rice from U.S. They are also concerned that there will be some speculation on paddy rice market due to the Japanese earthquake.

On March 31, 2011 the paddy rice price was 1,450 TL/MT in the Bandirma CME and 1,200 TL/MT in the Mersin CME. On the same day the domestic rice price was 1999 TL/MT and the imported rice price was 1510 TL/MT at the Mersin CME.

	Paddy Rice (USD/MT)													
	SE P	OC T	NO V	DE C	JA N	FEB	MAR	APR	MAY	JUN E	JUL Y	AU G		
200 7	551	589	564	598	581	616	587	698	732	1,01 6	786	992		
200 8	910	535	584	621	576	618	633	677	730	684	724	604		
200 9	827	767	848	762	701	1,01 2	1,02 1	1,07 7	1,07 1	1,27 4	939	952		
201 0	850	844	850	780	750	920	951	950						

Source: Bandirma CME

#### Trade

### Wheat

## **Imports**

Total Turkish wheat imports are expected to reach 3.4 MMT by the end of MY 2010. There was a high volume of imports between February and April 2011. Imports in February alone were 1.84 MMT.

Traditionally, Kazakhstan and Russia are the main wheat suppliers to Turkey. Because of its high protein and energy content, millers like wheat from Kazakhstan. The other advantage is they can purchase small shipments and transportation is easy. High-quality wheat flour producers believe that only U.S. DNS wheat is comparable to wheat from Kazakhstan, but the need to buy large quantities and the higher transport cost from the United States gives Kazakhstan a marketing advantage. Russian wheat also benefits from the size and transportation issue but usually only has 12-13% protein compared to the Kazakh wheat which has 13-15% protein. Because of the Russian export ban and an export quota in the Ukraine, the United States became Turkey's major supplier in 2010/2011.

Table 11: Wheat imports

TURKEY: WHEAT IMPORTS					
MONTH	IMPORTS MY 2008 (MT)	IMPORTS MY 2009 (MT)	IMPORTS MY 2010 (MT)		
June	224,741	172,901	125,320		
July	131,565	95,530	159,029		
August	251,868	284,780	226,965		
September	375,754	267,215	132,372		
October	415,633	409,970	231,759		
November	266,728	229,368	156,859		
December	299,517	289,393	347,507		
January	236,786	187,219	320,242		
February	349,971	130,891	148,909		
Sub-Total	2,552,563	2,067,267	1,848,962		
March	392,171	378,095			

April	357,526	252,511		
May	307,081	225,663		
MY	3,609,341	2,923,536	3,400,000*	
TOTAL				

\*forecast Source:GTA

On February 25, 2011, the wheat import tariff was reduced to zero for shipments clearing customs by May 1, 2011. Traders and wheat millers quickly tried to contract for U.S. wheat after this announcement was made, but because of the limited many traders could not arrange a contract. According to estimates, after the tariff reduction 1.2 MMT of wheat was imported to Turkey. Some of the vessels were destined for other destination but were diverted to Turkey. Wheat from Brazil, Argentina and Paraguay dominated the market for this short time period. Most Latin American wheat was 12% protein and most U.S wheat was 13% and higher protein.

TMO also allocated its quotas of 230,000 MT milling wheat and 100,000 MT of EU durum wheat to the private sector. So far, the entire milling wheat quota was used but only a small amount of the durum wheat quota was used.

Due to the high amount of imports and high stock levels at private sector warehouses, wheat imports will slow down in the beginning of MY 2011 but is expected to reach 3 MMT in the end of MY 2011. U.S. imports will be strong in MY 2011 if the Russian export ban continues through into the fall.

The Turkish inward process regime is a useful tool for millers to be competitive in the wheat flour export market. Exporters of wheat products such as wheat flour and pasta exporters are eligible to get special import licenses when they export wheat products. For example, when pasta exporters export 100 MT of pasta they are eligible to import 175.4 MT of wheat at a zero tariff rate (conversion rate is 1.754) and when a wheat flour producer exports 100 MT of wheat flour they are eligible to import 140 MT of wheat duty free. Usually wheat flour exporters and pasta exporters do not use this zero tariff import license by themselves but they sell it to international trading companies or experienced domestic traders. The price offered for the licenses changes according to world wheat prices. Recently, the market value of the licenses was 50 USD/MT but normally is 90 USD/MT and even reached 190 USD/MT in MY 2009.

Table 12: Major wheat suppliers

TURKEY: MAJOR WHEAT SUPPLIERS						
Country	MY 2007 MT)	MY 2008 (MT)	MY 2009 (MT)	MY 2010 (MT)*		
Russia	886,393	2,003,918	2,184,316	572,066		
Kazakhstan	1,032,444	219,298	432,536	322,445		
Ukraine	59,828	154,432	108,802	143,685		
Hungary	142,248	143.951	18,458	119,234		
Moldova	446	55,399	40,049	35,105		
Lithuania	48,402	106,872	88,948	38,580		
U.S.	45,537	46,821	0	338,072		
Others	312,474	1,022,457	50,427	279,775		

MY Total	2,527,772	3,609,341	2,923,536	1,848,962

\*June, 2010-Feb.2011

Source: GTA

# **Exports**

Turkish wheat exports usually depend on TMO export policy. In MY 2009, TMO procured high amounts of wheat and had to export a lot of wheat to have warehouse space available for MY 2010 procurements. TMO has not exported any wheat so far in MY 2010. TMO has 1.6 MMT of wheat stocks and doesn't seem likely to sell it to the domestic market, however in the following months TMO is expected export 300,000 MT of wheat.

Table 13: Wheat export markets

Turkey: Wheat export market					
Country	MY 2007 (MT)	MY 2008 (MT)	MY 2009 (MT)	MY 2010(MT)*	
Syria	0	0	334,973	0	
Italy	9,326	0	225,366	32,950	
Egypt	0	0	145,034	20,415	
Lebanon	0	0	38,968	0	
Iraq	235	0	1,816	1,424	
Israel			108,744	17,740	
Switzerland	3	4,424	3	6	
Others	8,717	591	0	59,630	
Total	18,281	8,123	1,343,208	132,165	

\*June, 2010-Feb.2011

Source: GTA

Turkish wheat flour exports already reached 1.38 MMT and are expected to reach 1.8 MMT in MY 2010. Turkish wheat flour exports in MY 2011 are forecasted at 1.8 MMT. Iraq, Indonesia and Philippines are the most important markets for the Turkish wheat flour industry.

Indonesia and the Philippines need low quality wheat flour to make noodles. Empty containers returning to Asia are used to carry wheat flour at very cheap rates to Indonesia and Philippines. The proximity of Northern Iraq gives Turkish exporters an advantage in that market as well. The main Turkish exporters to the Middle East are located in either Gaziantep or in Konya regions. Turkish trucks drivers carry wheat flour to Nusaybin/Mardin and Northern Iraq trucks drivers carry it from Nusaybin to Zaho for 5 USD/MT. According to Turkish traders, Iran is trying to capture some of the market share in the Iraq wheat flour market. However, they believe that mills in Iran are using older technology and cannot produce the high quality wheat flour used for bread in Iraq.

Table 14:Wheat flour exports

	Turkey: Wheat flour export						
Month	MY 2007 (MT)	MY 2008 (MT)	MY 2009 (MT)	MY 2010 (MT)			
June	75,630	102,002	176,761	164,533			
July	131,013	107,338	166,938	214,371			
August	118,713	130,138	140,478	149,139			
September	92,422	138,073	154,753	143,360			
October	61,629	151,091	194,313	142,873			
November	66,435	86,329	126,860	121,524			
December	95,015	82,984	175,065	173,989			
January	111,714	91,302	131,663	133,183			
February	92,919	109,721	145,332	143,771			
Sub-Total	845,490	998,978	1,412,163	1,386,743			
March	75,298	141,706	138,893				
April	60,276	186,165	166,880				
May	73,775	141,185	153,496				
MY TOTAL	1,054,839	1,468,034	1,871,432	1,800,000*			

Source: GTA

Table 15: Major wheat flour markets

TURKEY: MAJOR WHEAT FLOUR MARKET							
Country	Country MY 2007 (MT) MY 2008 (MT) MY 2009 (MT) MY 2010 *(MT)						
Iraq	338,432	631,478	796,528	646,945			
Indonesia	177,657	305,967	429,826	392,181			
Philippines	240	69,824	126,749	48,674			
Sudan	31,672	66,523	72,337	9,026			
Yemen	0	670	16,491	7,725			
Israel	26,148	66,523	24,370	20,342			
Others	480,690	329,009	405,131	261,850			
MY Total	1,054,839	1,469,994	1,871,432	1,386,743			

\*June 2010-February 2011

Source: GTA

Pasta exports have been very steady in MY 2010. They already reached 230,206 MT and are expected to reach 280,000 MT. Pasta factories in Turkey invested heavily in MY 2010 to increase their production capacities, however a major challenge will be overcoming decreased durum wheat production in MY 2011 as many high quality durum wheat producers, especially in the Sanliurfa region, switched to cotton production. Pasta companies that have contracted with farmers will not have a supply problem but the rest will need to import durum wheat in MY 2011. Pasta exports should reach 295,000 MT in MY 2011 with the help of new capacity improvements.

	TURKEY: PASTA EXPORTS						
MONTH	MY 2007 (MT)	MY 2008 (MT)	MY 2009	MY 2010*			
	, ,		(MT)	(MT)			
June	12,342	15,748	16,783	20,925			
July	15,174	16,705	23,300	29,015			
August	16,746	16,782	22,001	25,900			
September	15,001	12,210	19,053	23,056			
October	13,864	13,034	21,123	24,562			
November	20,536	10,283	19,642	20,268			
December	16,723	9,957	25,488	30,169			
January	15,257	12,180	25,298	26,943			
February	16,279	10,492	21,507	29,368			
Sub-Total	141,922	117,391	194,195	230,206			
March	16,602	15,048	26,664				
April	14,883	13,196	25,435				
May	17,877	15,283	24,789				
MY TOTAL	191,285	160,918	271,083	280,000			

\*June 2010-February 2011

Source: GTA

Africa is an important and growing market for Turkish pasta exporters. Japan is an important market for the Turkish pasta exporters, because of the premium they pay (1,300 USD/MT) for high quality pasta. It is unknown at the moment that how the Japanese market will be effected by the recent disasters.

Table 17: Pasta flour export markets

TUI	TURKEY: MAJOR PASTA EXPORT MARKETS					
Country	MY 2007	MY 2008	MY 2009	MY 2010 *(MT)		
	(MT)	(MT)	(MT)			
Iraq	16,153	13,437	24,977	19,553		
Benin	11,766	4,370	19,663	9,850		
Japan	3,598	10,260	14,170	9,833		
Togo	12,838	8,941	21,458	20,341		
Angola	2,157	7,088	17,000	18,171		
Others	144,917	116,822	173,815	152,458		
MY Total	191,429	160,918	271,083	230,206		

\*June 2010-February 2011

Source: GTA

Semolina is very common raw material for desserts in Turkey and the Middle East. Semolina production and trade is growing along with pasta production and export growth.

Table 18: Semolina exports

TURKEY:SEMOLINA EXPORT

MONTH	MY 2007 (MT)	MY 2008 (MT)	MY 2009 (MT)	MY 2010 (MT)
June	3,874	5,788	4,931	8,847
July	3,583	7,835	7,368	11,365
August	4,139	3,843	6,022	9,892
September	5,142	2,980	8,902	6,559
October	6,399	3,169	5,885	13,357
November	11,511	3,051	6,362	10,131
December	7,691	1,939	7,937	14,755
January	7,418	2,223	10,217	13,434
February	6,217	3,157	8,654	10,524
Sub-Total	55,974	33,985	66,278	98,864
March	4,521	2,227	8,656	
April	7,252	3,342	13,966	
May	7,408	6,120	7,643	
MY TOTAL	75,154	45,676	96,543	125,000*

Source: GTA

Table 19: Major semolina export markets

Turkey: Major semolina export markets					
Countries	MY 2007 (MT)	MY 2008 (MT)	MY 2009 (MT)	MY 2010 * (MT)	
Oman	0	0	10,938	8,662	
Iraq	3,582	6,253	15,547	21,754	
Saudi Arabia	3,139	7,833	13,136	4,241	
Egypt	8,783	5,528	9,755	9,139	
Syria	7,015	4,192	11,168	18,639	
Others	52,636	21,870	35,999	25,905	
Total	75,155	45,676	96,543	88,340	

\*June 2010-February 2011

Source: GTA

## **Barley**

Turkey imported 32,101 MT of barley, mainly malting barley, and exported 22,199 MT in the first nine months of MY 2010. TMO plans to open a tender for barley exports in the following months in order to reduce barley stocks.

Turkey traditionally exports barley to Middle Eastern countries. Due to two years of drought, Turkey didn't export much barley in MY 2007 and MY 2008. After a bumper crop in MY 2009 led to high stocks, barley exports reached 754,848 MT in MY 2009. Saudi Arabia (558,970 MT) was the largest barley export market in MY 2009.

The malting industry usually imports high-quality barley from France.

Table 20: Barley foreign trade

	TURKEY: BARLEY FOREIGN TRADE						
	IMPORTS	IMPORTS	IMPORTS	EXPORTS	EXPORTS	EXPORTS	
MONTH	MY 2008	MY 2009	MY 2010	MY 2008	MY 2009	MY	
	(MT)	(MT)	(MT)	(MT)	(MT)	2010(MT)	
June	1,018	3,000	3,300	0	1,441	22,100	
July	0	2,765	10,788	0	0	0	
August	10,369	0	1,500	0	980	0	
September	7,083	4,234	3,870	0	0.3	0	
October	38,917	40	3,309	0.3	108,930	60	
November	13,052	6,080	28	0	84,270	0	
December	9,718	14,577	2,506	0	105,601	7	
January	33,868	8,002	3,300	0	51,700	22	
February	0	0	3,500	80	15,783	10	
Sub-Total	114,025	38,698	32,101	80	368,705	22,199	
March	8,134	13,255		0	136,491		
April	11,421	10,517		0	128,235		
May	7,531	0		0	121,415		
MY TOTAL	141,111	62,470	70,000	80.3	754,848	150,000	

Source: GTA

Table 21: Barley export markets

Turkey: Quantity of barley exported				
Countries	MY 2007 (MT)	MY 2008 (MT)	MY 2009 (MT)	MY 2010 (MT)*
Saudi Arabia	0	0	558,970	22,100
Syria	0	0	82,000	0
Morocco	0	0	55,000	0
Libya	0	0	52,000	0
UK	245	0	0	0
Others	49	80	6,878	99
Total	294	80	754,848	22,199

\*June 2010-Feb. 2011

Source; GTA

Table 22: Barley suppliers

Table 22. Barley suppliers					
Turkey: Quantity of barley imported					
Countries MY 2007 (MT) MY 2008 (MT) MY 2009 (MT) MY 2010 (MT)*					
France	42,497	71,957	57,016	29,574	
Ukraine	46,006	25,726	0	2,500	
United Kingdom	0	0	5,454	0	
Russia	22,388	29,898	0	0	

Romania	0	9,430	0	0
Others	77,558	19	1	27
Total	188,449	141,111	62,470	32,101

\*June 2010-Feb. 2011

Source: GTA

#### Corn

Due to the Biosafety Law's implementation, since September 26, 2010 corn and corn derivatives cannot be imported, except in limited quantities from some EU countries by paying a premium to get certified non-biotech corn. As a result, corn imports were only 88,430 MT in the first six months of MY 2010. There was high demand for corn importation in April 2011 but imports remained extremely limited. Applications for approval of biotech corn for feed are currently under review. If the government approves biotech corn events and the corn price decreases, MY 2010 corn imports could reach 400,000 MT, however if the events are not approved, corn imports will be around 100,000 MT.

Table 23: Corn foreign trade

1 abic 23. Co	Table 25: Com foreign trade					
		TURKEY	: CORN FOR	EIGN TRADE		
MONTH	IMPORT MY 2008 (MT)	IMPORT MY 2009 (MT)	IMPORT MY 2010 (MT)	EXPORT MY 2008 (MT)	EXPORT MY 2009 (MT)	EXPORT MY 2010(MT)
September	420	6,876	3,357	277	111,499	8
October	1,730	4,403	3,535	2,026	90,915	1,031
November	2,682	9,588	2,163	3,069	63,822	1,767
December	19,508	72,197	24,553	3,868	1,178	2,607
January	23,026	27,469	33,612	2,299	930	1,592
February	16,930	36,755	21,210	622	1,249	922
Sub-Total	64,296	157,288	88,430	12,161	269,593	7,927
March	42,777	111,093		1,828	654	
April	82,016	64,405		640	480	
May	105,943	32,429		990	59	
June	32,430	83,515		732	832	
July	42,666	38,197		48,697	1,014	
August	46,278	24,892		2,209	19	
MY TOTAL	416,406	511,819	400,000	67,258	271,617	20,000

Source: GTA

Turkey imports corn duty free under an inward processing regime, or with a customs duty of 130% for corn outside of the inward processing regime. Because of Biosafey Law, corn, starch or corn byproducts exporters are not currently using the inward processing regime.

Table 24: Corn suppliers

**Turkey: Quantity of corn imports** 

Countries	MY 2007 (MT)	MY 2008 (MT)	MY 2009 (MT)	MY 2010 (MT)*
Ukraine	228,430	181,788	137,392	21,136
Romania	67	42,829	77,380	26,510
Russia	0	100,148	84,750	2,871
U.S.	496,690	22,988	7,225	145
Argentina	317,480	11,390	13,055	8,052
Others	117,806	57,263	192,017	29,716
Total	1,160,473	416,406	511,819	88,430

\*Sept. 2010-Feb. 2011

Source: GTA

Some companies tried to import corn from EU countries but because of adventitious presence of small levels of biotech material, the product was rejected at the port. The Ministry of Agriculture and Rural Affairs uses rapid, simple test kits and has a zero tolerance for any biotech contamination. Corn import prices have increased to 350 USD/MT. Importers are ready to pay a premium for biotech free corn but exporting companies are not able to guarantee that there will not be at least some level of adventitious biotech presence. TMO procured 83,491 MT of corn at a price of 490 TL and the TMO sale price was 590 TL/MT on April 7, 2011. TMO has 166,982 MT of stocks.

Not only the feed sector but also the starch sector is running out of corn stocks at the moment. Some starch factories cannot work at full capacity because of a shortage of stocks.

Table 25: Corn export market

	Turkey: Quantity of corn exports					
Countries MY 2007 (MT) MY 2008 (MT) MY 2009 (MT) MY 2010 (MT)						
Syria	0	17,479	231,800	120		
Italy	2,375	4,866	5,185	2,481		
Germany	54	587	1,380	872		
Spain	475	1,345	912	552		
France	307	2,144	645	654		
Others	11,418	38,519	32,729	3,248		
Total	12,061	64,940	272,651	7,927		

\*Sept. 2010-Feb. 2011

Source: GTA

Table 26: DDGS imports

Turkey: Quantity of DDGS imported				
Month	MY 2007 (MT)	MY 2008 (MT)	MY 2009	MY 2010

			(MT)	(MT)
September	35,387	54,154	46,131	151,276
October	71,479	42,147	36,580	129,130
November	26,785	59,248	91,525	19,292
December	42,324	28,647	44,691	9,444
January	38,024	16,358	9,675	6,446
February	36,537	33,860	7,852	5,826
Sub-Total	250,536	234,414	236,454	321,414
March	79,511	46,487	4,013	
April	66,675	19,825	8,078	
May	19,630	24,461	37,586	
June	54,832	48,976	49,144	
July	26,374	21,117	35,773	
August	16,078	20,464	46,131	
MY TOTAL	513,636	415,744	413,944	400,000*

\*Sept. 2010-Feb. 2011

Source: GTA

A new DDGS standard was published by the Turkish Standard Institute (TSE) on March 29, 2011. The TSE standard is voluntary at the moment but is expected to be adopted by the Ministry of Agriculture and Rural Affairs as mandatory very soon. DDGS are currently blocked by the Biosafety Law however it is expected that this barrier will be lifted as early as May or June if the corn biotech applications are approved for feed use.

The DDGS standard, if made mandatory, will severely restrict golden DDGS imports to Turkey because of its limitation on oil content. According to the standards, DDGS should contain a minimum of 5% and a maximum of 10% of oil. Most DDGs produced in the United States contain between 10 and 13% oil. In addition, DDGS are not generally sold according to oil content, but instead are sold according to protein/fat ratio. For this reason, it will not be easy to separate them according the oil content required by the new Turkish standard. The United States producers and Turkish users of the product submitted official comments on the draft standards explaining this problem and asking for the oil content to be increased, however the oil range was not increased. Some Turkish oilseed producing companies claim that "high-oil content" DDGS (13-15% oil) are imported and the oil is extracted in order to get around import duties for oil, however there is no evidence to support this claim. It is common knowledge that in fact that DDGs are used directly in feed production without any crushing. Therefore, this appears to be an intentional move to restrict imports of DDGs.

Wheat bran producers and oilmeal producers have been lobbying the government to restrict DDGS imports but poultry producers and livestock producers need cheap feed to be competitive in the export and domestic market.

Table 27: DDGS suppliers

Turkey: DDGS imports				
Countries	MY 2007 (MT)	M Y 2008 (MT)	MY 2009 (MT)	MY 20010 (MT)*

Total	513,636	415,744	413,944	321,414
Others	0	480	27,312	23,865
Russia	615	0	0	477
Ukraine	1,033	5,920	13,699	4,114
Canada	21,899	7,099	3,972	918
U.S.	489,891	402,245	368,961	292,040

\*Sept. 2010-Feb. 2011

Source: GTA

Table 28: Corn Gluten Feed imports

	Turkey: Quantity of CGF imported					
Month	MY 2007 (MT)	MY 2008 (MT)	MY 2009	MY 2010		
			(MT)	(MT)		
September	68,861	44,341	37,529	52,811		
October	76,830	38,054	35,472	52,550		
November	59,495	70,309	11,837	28,166		
December	80,276	10,251	48,181	13,275		
January	53,451	16,817	30,878	8,685		
February	29,298	37,519	3,150	14,140		
Sub-Total	368,211	217,291	167,047	169,627		
March	82,891	41,826	6,545			
April	85,037	7,808	12,525			
May	26,086	22,928	6,650			
June	66,041	48,305	8,615			
July	37,797	42,276	20,744			
August	13,814	27,664	70,612			
MY TOTAL	679,877	408,098	292,738	250,000		

Source: GTA

Table 29: CGF suppliers

Turkey: CGF imports						
Countries MY 2007 (MT) M Y 2008 (MT) MY 2009 (MT) MY 20010 (MT)*						
U.S.	656,050	355,326	216,992	107,007		
Canada	0	0	0	0		
Ukraine	21,529	36,724	43,123	30,942		
Russia	0	0	846	0		
Others	2,298	16,048	31,777	31,678		
Total	679,877	408,098	292,738	169,627		

\*Sept.2010-Feb .2011

Source: GTA

Rice

The United States and Russia are the major rice suppliers to Turkey. Turkey imports paddy rice, mainly medium grain paddy rice, mills it in Turkey and sells it either to the domestic market or exports it as milled rice.

Table 30: Rice foreign trade

	Turkey: Rice foreign trade									
MONTH	MPORTS MY 2008 (MT)	MPORTS MY 2009 (MT)	IMPORTS MY 2010 (MT)	EXPORTS MY 2008 (MT)	EXPORTS MY 2009 (MT)	EXPORTS MY 2010(MT)				
September	31,486	7,224	14,283	392	182	6,173				
October	7,742	10,825	26,654	715	541	6,884				
November	4,427	10,611	49,408	1,795	124	1,727				
December	4,507	36,434	51,152	2,590	134	11,516				
January	3,040	43,556	50,493	4,886	140	10,265				
February	2,453	51,028	51,377	4,789	77	13,333				
Sub-Total	53,655	159,678	243,367	15,167	1,198	49,898				
March	9,468	71,977		899	114					
April	13,427	49,498		3,568	58					
May	39,202	35,504		2,556	2,487					
June	30,567	59,701		637	5,639					
July	39,001	48,355		744	8,291					
August	24,457	33,989		302	8,539					
$\overline{MY}$	209,777		400,000*	23,873	26,326	80,000*				
TOTAL		458,702								

### **Imports**

The import duty remained at 34% for paddy rice in MY 2011 and 45% for milled rice. Rice imports reached 243,367 MT and are expected to reach to 300,000 MT in MY 2010. There is generally a decrease in rice consumption in the first months of MY 2010 but after the Holy month of Ramadan starts in August demand will increase not only from Turkey but also from whole Middle East region.

The imported varieties from the United States are Jupiter and Carlos. Due to price and quality advantages American rice had a strong position in Turkish market in MY 2009. The GSM-102 credit is also an important tool for American rice sales in Turkey. The Jupiter variety is getting very popular in Turkey and taste of Jupiter is very suitable for domestic market.

The U.S. paddy rice price is higher than domestically produced paddy rice at the moment. For this reason imports have almost stopped. In addition, because there is a high amount of domestically produced stocks and rice consumption is slow this time of year, traders fear that the government is trying to slow down paddy rice imports by using SPS trade barriers. For example, the Ministry of Agriculture has very strict regulations against different nematodes on paddy rice and rejects shipments when certain nematodes are found. Turkey seems to have increased the intensity of inspections in recent months and unlike many other countries, Turkey currently does not allow

treatment with methyl bromide or safeguarding for paddy rice with nematodes. This has caused increased fear among traders so unless appropriate treatment methods are adopted, it could prevent future paddy rice imports to Turkey and negatively impact Turkey's rice milling industry. When the new GSM announced in April there could be some paddy rice imports in May and June, 2011 if prices are not too high and the SPS concerns have been resolved.

Russia became a new leading milled rice supplier for Turkey in MY 2009 and MY 2010 although traders complain about the output ratio (amount of rice after milling) of Russian paddy rice. Millers report that Russian paddy rice has 30-40% output ratio and this is very low compared to U.S. and domestic varieties. Despite quality problems, other factors such as logistical advantages, the availability of small orders, and lower prices give Russian rice an advantage. Financial tools are critical for traders seeking to import large amounts of higher quality rice to Turkey. There is one large company in Turkey dominating the trade with Russian suppliers.

Greece, Bulgaria and Romania are active long grain rice exporters to Turkey, because of the availability of small sized orders.

Table 31: Rice imports

Turkey: Rice imports								
Country	MY 2007	MY 2008	MY 2009	MY 2010*				
U.S	63,345	53,268	165,102	99,075				
Russia	4,331	5,919	81,680	95,360				
Egypt	118,258	51,898	56,889	192				
Thailand	2,664	21,948	2,016	848				
Pakistan	4,564	15,541	21,798	3,045				
Italy	54,432	4,910	29,426	5,316				
Others	13,959	56,293	101,791	39,531				
Total	261,553	209,777	458,702	243,367				

\*SEPTEMBER 2010-FEBRUARY 2011

Source: GTA

### Exports rice

Rice exports reached record levels in MY 2010 as Turkey benefitted from increased exports to the Middle East after the Egyptian rice export ban. Turkey tends to import paddy rice, mill it in Turkey, and export milled rice to Middle East countries. Libya, Jordan, Syria and Iraq are becoming the major rice export markets for Turkey. Due to uncertainty regarding Egypt paddy rice exports, Turkish paddy rice exports to the Middle East are growing and expected to grow in MY 2011.

Table 32: Rice imports classified by process

	Rice import; classified by process								
		MY 2	009			MY 20	)10		
Country	Rice in the Husk	Husked rice (Brown)	Semi- Wholly milled	Broken rice	the	Husked rice (Brown)	IW holly	Broken rice	

			rice				rice	
U.S	160,549	2	4,551	0	99,069	0	6	0
Russia	81,180	0	500	0	91,927	0	3,433	0
Egypt	0	0	56,889	0	0	0	192	0
Thailand	0	11	2,005	0	0	5	843	0
Pakistan	0	0	21,798	0	0	0	3,045	0
Italy	17	20	29,194	0	0	0	5,316	0
Others	64,321	1,308	36,357	0	32,212	0	7,317	0
Total	306,067	1,341	151,294	0	223,208	5	20,152	0

\*SEPTEMBER 2010-FEBRUARY 2011

Source: GTA

Table 33: Type of rice imported

	Paddy Rice import; classified by type of rice									
		MY 2009		MY 2010						
Country	Long Medium Round Grain		Round Grain	Long Medium		Round Grain				
	grain	Grain	Rice	grain	Grain	Rice				
U.S	2,714	157,835	0	22,613	52,397	0				
Russia	9,796	56,733	14,652	9,083	58,821	9,582				
Egypt	0	0	0	0	0	0				
Thailand	0	0	0	0	0	0				
Pakistan	0	0	0	0	0	0				
Italy	0	0	0	0	0	0				
Others	0	42,992	949	1,274	22,176	6,013				
Total	32,888	257,560	15,601	32,970	133,394	15,595				

\*SEPTEMBER 2010-FEBRUARY 2011

Source: GTA

Table 34: Rice exports

	Turkey: Rice Exports								
Countries	MY 2007 (MT)	M Y 2008 (MT)	MY 2009 (MT)	MY 20010 (MT)*					
Syria	0	9,049	17,002	15,753					
Jordan	0	4,711	3,668	2,484					
Sudan	0	0	621	1,525					
Iraq	90	1,042	3,451	981					
Others	2,011	9,071	1,584	42,488					
Total	2,911	23,873	26,326	63,231					

\*SEPTEMBER 2010-FEBRUARY 2011

Source: GTA

# Lentils

Turkey mainly imports lentils from Canada and exports them to the Middle East. Iraq, Sudan, Saudi Arabia and Egypt are the main export markets of Turkey. Due to high domestic yields, exports increased in MY 2010 and are expected to be high in MY 2011.

Table 35: Lentil foreign trade

	Turkey: Lentil foreign trade									
MONTH	IMPORT MY 2008 (MT)	IMPORT MY 2009 (MT)	IMPORT MY 2010 (MT)	EXPORT MY 2008 (MT)	EXPORT MY 2009 (MT)	EXPORT MY 2010(MT)				
July	9,856	3,622	5,020	1,242	14,953	37,661				
August	9,025	2,083	0	2,275	11,181	23,127				
September	15,403	2,300	1,590	2,541	4,298	10,261				
October	21,091	15,080	6,140	2,133	4,159	11,727				
November	68,188	15,693	10,812	6,867	7,747	8,937				
December	43,756	29,860	28,781	14,768	15,923	14,257				
January	28,881	41,400	38,179	15,653	13,360	12,702				
February	16,176	23,201	21,519	12,052	11,109	11,810				
Sub-Total	196,200	110,038	112,041	45,479	71,621	118,672				
March	13,325	35,686		6,587	7,491					
April	10,708	50,319		14,393	11,320					
May	3,519	7,144		14,889	15,112					
June	293	196		8,230	30,186					
MY TOTAL	240,221	226,584	150,000*	101,630	146,839	150,000				

Source: GTA

Table 36: Lentil imports

Turkey: Lentil imports							
Countries	M Y 2008 (MT)	MY 2009 (MT)	MY 20010 (MT)*				
U.S.	722	2,928	4,006				
Canada	226,463	206,884	106,423				
Ethiopia	0	9,225	936				
Russia	428	392	0				
Others	12,608	7,155	676				
Total	240,221	226,584	112,041				

\*SEPTEMBER 2010-FEBRUARY 2011

Source:GTA

# **Policy:**

History of regulations on biotechnology in Turkey

Biotech regulations were introduced in Turkey for the first time in October 2009 when a regulation was published by the Ministry of Agriculture and Rural Affairs without warning and implemented immediately. This regulation was amended several times and severely affected imports to Turkey, including imports of soy, corn, and by-products of these commodities. According to one amendment to the October 2009 regulation, transgenic corn could only be imported until March 1, 2010. According to another amendment on April 28, 2010 the Ministry of Agriculture gave authority to a Scientific Committee to make decisions on biotech products. The Scientific Committee's decision on the corn events was published on May 26, 2010, and approved all EU approved corn events for importation for certain approved uses, except the T25 event in corn. This effectively blocked corn importation since that event can be contained in any shipment. A Biosafety Law was published in the Official Gazette (No: 27533) in March 2010 with an implementation date of September 26, 2010. This Law replaced the previous regulations once it was implemented. A Biosafety Board established by the Law, with the power to evaluate applications for approval for importation of biotech events. Several Turkish associations applied for approval to import various biotech events, but so far the Feed millers Association applications for 3 soy events for feed use are the only ones that have been approved. Other applications are under review.

## Premium Price Supports

The soybean premium rose from 247 TL/MT to 350 TL/MT in MY 2009 and remained the same in MY 2010 and rose to 500 TL/MT in MY 2011.

The cotton premium was increased from 324 TL to 420 TL/MT in MY 2009 and remained the same in MY 2010 and MY 2011. The corn premium also is unchanged at 40 TL/MT in MY 2010 and MY 2011.

## **Production, Supply and Demand Data Statistics:**

Wheat Turkey	2009/2010	2010/2011	2011/2012
	Market Year Begin:	Market Year Begin:	Market Year Begin:
	Jun 2009	Jun 2010	Jun 2011

	USDA	New	USDA	New	USDA	New
	Official	Post	Official	Post	Official	Post
Area Harvested	7,800	7,800	8,000	8,000		7,425
Beginning	1,546	1,550	1,740	1,733		1,783
Stocks						
Production	18,450	18,450	17,000	17,000		16,700
MY Imports	3,218	2,922	2,500	3,400		3,000
TY Imports	3,192	2,922	2,500	3,400		3,000
TY Imp. from	38	0	0	750		300
U.S.						
Total Supply	23,214	22,922	21,240	22,133		21,483
MY Exports	4,374	4,389	3,000	3,150		3,000
TY Exports	4,274	4,389	3,000	3,150		3,000
Feed and	800	800	700	700		700
Residual						
FSI	16,300	16,000	16,500	16,500		16,500
Consumption						
Total	17,100	16,800	17,200	17,200		17,200
Consumption						
Ending Stocks	1,740	1,733	1,040	1,783		1,283
Total	23,214	22,922	21,240	22,133		21,483
Distribution						
1000 HA, 1000 MT						

Barley Turkey	2009/20	10	2010/20	11	2011/2	012	
	Market Year Begin:		Market Year	Begin:	Market Yea	Market Year Begin:	
	Jun 200	<b>19</b>	Jun 201	10	Jun 20	)11	
	USDA	New	USDA	New	USDA	New	
	Official	Post	Official	Post	Official	Post	
Area Harvested	3,400	3,400	3,350	3,350		3,200	
Beginning	793	176	790	83		103	
Stocks							
Production	6,500	6,500	5,900	5,900		5,700	
MY Imports	178	62	150	70		250	
TY Imports	156	60	150	70		250	
TY Imp. from	0	0	0	0		0	
U.S.							
Total Supply	7,471	6,738	6,840	6,053		6,053	
MY Exports	781	755	400	150		30	
TY Exports	801	755	400	150		30	

Feed and	5,000	5,000	4,900	4,900	5,000
Residual					
FSI	900	900	900	900	900
Consumption					
Total	5,900	5,900	5,800	5,800	5,900
Consumption					
Ending Stocks	790	83	640	103	123
Total	7,471	6,738	6,840	6,053	6,053
Distribution					
1000 HA, 1000 MT				•	

Corn Turkey	2009/2010 Market Year Begin: Sep 2009		2010/2011 Market Year Begin: Sep 2010		2011/2012 Market Year Begin: Sep 2011	
	Official	Post	Official	Post	Official	Post
Area Harvested	500	500	490	490		400
Beginning	882	785	868	725		405
Stocks						
Production	4,000	4,000	3,600	3,600		3,200
MY Imports	558	512	300	400		900
TY Imports	527	500	300	400		900
TY Imp. from	0	7	0	35		400
U.S.						
Total Supply	5,440	5,297	4,768	4,725		4,505
MY Exports	272	272	50	20		0
TY Exports	161	161	50	20		0
Feed and	3,400	3,400	3,300	3,400		3,400
Residual						
FSI	900	900	900	900		900
Consumption						
Total	4,300	4,300	4,200	4,300		4,300
Consumption						
Ending Stocks	868	725	518	405		205
Total	5,440	5,297	4,768	4,725		4,505
Distribution						
1000 HA, 1000 MT		-	-			-

Rice, Milled Turkey	2009/2010 Market Year Begin: Sep 2009		2010/2011 Market Year Begin: Sep 2010		2011/2012 Market Year Begin: Sep 2011							
							USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
	Beginning Stocks	265	206	400	338		308					
	Milled Production	400	400	450	450		430					
Rough Production	667	667	750	750		717						
Milling Rate (.9999)	6,000	6,000	6,000	6,000		6,000						
MY Imports	520	458	400	300		300						
TY Imports	520	458	400	300		300						
TY Imp. from U.S.	314	165	0	130		140						
Total Supply	1,185	1,064	1,250	1,088		1,038						
MY Exports	26	26	50	80		85						
TY Exports	40	40	50	80		85						
Consumption and	759	700	650	700		700						
Residual												
Ending Stocks	400	338	550	308		253						
Total Distribution	1,185	1,064	1,250	1,088		1,038						
1000 HA, 1000 MT	•	I	•	1	•							